

AMENDMENT TO THE CLAIMS

1. (Canceled)

2. (Currently Amended) The printing device in accordance with claim ~~[[1]]~~ 37, wherein the ~~cooling device (35) cools the transfer medium (34)~~ to contact face has a temperature $\leq 60^{\circ}\text{C}$.

3. (Currently Amended) The printing device in accordance with claim ~~[[2]]~~ 37, wherein the ~~cooling device (35) cools the transfer medium (34)~~ to contact face has a temperature $\leq 40^{\circ}\text{C}$.

Claims 4-10 (Canceled)

11. (Currently Amended) The printing device in accordance with claim ~~[[10]]~~ 37, wherein the surface temperature of each of the substrates (13) entering the transfer zone is 100°C to 170°C at least in certain areas.

12. (Canceled)

Serial No.: 10/519,766

13. (Currently Amended) The printing device in accordance with claim [[12] 11], wherein a plurality of the temperature sensors (21) are arranged over ~~an entire~~ a print width of the transport system and [[a]] one of a plurality of heating elements (24) is assigned to each of the temperature sensors (21), and a heating output is separately controlled within zones over [[a]] the print width.

14. (Previously Presented) The printing device in accordance with claim 13, wherein each of the temperature sensors (21) is a pyrometer.

15. (Previously Presented) The printing device in accordance with claim 14, wherein at least one liquid-cooled contact roller of the cooling device (35) rolls off on the transfer medium (34) or a climate-controlled air flow is directed onto the surface of the transfer medium.

16. (Canceled)

17. (Currently Amended) The printing device in accordance with claim [[34]] 37, wherein the ~~transform~~ transfer medium (34) is a transfer roller and has interior air cooling.

Serial No.: 10/519,766

18. (Previously Presented) The printing device in accordance with claim 15, wherein the cooling device (35) removes heat energy from the transfer medium (34) downstream of the transfer zone and upstream of ~~[[a]] the~~ photoconductor (32) of the print unit (30) in the transport direction of the transfer medium (34).

19. (Canceled)

20. (Currently Amended) The printing device in accordance with claim ~~[[1]] 37~~, wherein the toner transfer in the transfer zone is affected by at least one corona (12).

21. (Currently Amended) The printing device in accordance with claim ~~[[1]] 37~~, wherein each of the substrates (13) is placed on an electrically conductive base and, with respect to a charge of the toner, the base is charged with a reverse polarity.

22. (Currently Amended) The printing device in accordance with claim ~~[[1]] 37~~, wherein each of the substrates (13) is moved beyond the transfer

Serial No.: 10/519,766

medium (34) synchronously with respect to a circumferential speed of the transfer medium (34) by ~~[[a]]~~ the transport system (10), and a charge with an opposite polarity relative to a second charge of the toner is applied to the transfer medium (34) in the transport system (10).

23. (Currently Amended) The printing device in accordance with claim ~~[[1]]~~ 37, wherein on a surface which receives the toner powder the transfer medium (34) has an anti-adhesive layer (34.3), and the anti-adhesive layer (34.3) has a surface energy within a range of 15 mN/m to 30 mN/m.

24. (Currently Amended) The printing device in accordance with claim ~~[[1]]~~ 37, wherein the ~~substrate (13) is chargeable with heat energy by at least one heating element designed as at least one of~~ comprises an infrared radiator, a hot air blower, or a blower by an application of a flame.

25. (Canceled)

26. (Currently Amended) The printing device in accordance with claim ~~[[1]]~~ 37, wherein the heating element (24) heats a surface of each of the

Serial No.: 10/519,766

substrates (13) to a surface temperature range between 80°C and 200°C at least in certain areas of the surface.

27. (Canceled)

28. (Currently Amended) The printing device in accordance with claim [[1]] 37, wherein a plurality of [[the]] temperature sensors (21) are arranged over ~~an entire~~ a print width of the transport system and one of a plurality of heating elements (24) is assigned to each of the temperature sensors (21), and a heating output is separately controlled within zones over [[a]] the print width.

29. (Previously Presented) The printing device in accordance with claim 28, wherein each of the temperature sensors (21) arranged over an entire print width is a pyrometer.

30. (Currently Amended) The printing device in accordance with claim [[1]] 37, wherein at least one liquid-cooled contact roller of the cooling device (35) rolls off on the transfer medium (34) or a climate-controlled air flow is directed onto [[the]] a surface of the transfer medium.

Serial No.: 10/519,766

31. (Canceled)

32. (Currently Amended) The printing device in accordance with claim [[1]] 37, wherein the cooling device (35) removes heat energy from the transfer medium (34) downstream of the transfer zone and upstream of [[a]] the photoconductor (32) of the print unit (30) in the transport direction of the transfer medium (34).

33. (Currently Amended) The printing device in accordance with claim [[1]] 37, wherein the cooling device (35) removes heat energy from the transfer medium (34), which cools the toner powder to prevent the toner powder from adhering to [[the]] a surface of the transfer medium after transfer to the substrate is completed.

Claims 34-36. (Canceled)

37. (New) A printing device, comprising:
a supply of toner powder comprising ceramic or glass paste particles mixed in a plastic toner powder matrix;

Serial No.: 10/519,766

an electro-photographic print unit including a photoconductor roller, a charge station for imparting a charge to the photoconductor roller, and a developer unit for applying the toner powder to charged areas of the photoconductor roller;

a transfer medium for transferring the toner powder from the photoconductor roller to a transfer zone;

a transport system for sequentially conducting a plurality of distinct and separate plastic or glass substrates through the transfer zone, the transport system disposed in a horizontal configuration in the transfer zone beneath the transfer medium and on which each of the substrates is supported and transported through the transfer zone;

at least one heating element arranged upstream of the transfer medium in a transport direction of the substrates, wherein a surface of each of the substrates to be imprinted is heated by the at least one heating element to a predetermined temperature upstream from the transfer medium;

the transfer medium comprising one of a transfer roller or a transfer belt and including a contact face having a temperature lower than a surface of each of the heated substrates entering the transfer zone; and

a cooling device assigned to the transfer medium which removes heat from the contact face downstream of the transfer zone.

Serial No.: 10/519,766

38. (New) The printing device in accordance with claim 37, further comprising a temperature sensor arranged between the heating element and the transfer medium for monitoring the temperature of the substrates.

39. (New) The printing device in accordance with claim 38, wherein the heating element and the transport system is controlled by a control device as a function of a signal emitted by the temperature sensor.

40. (New) The printing device in accordance with claim 37, wherein the transport system comprises a plurality of roller bodies disposed in the horizontal configuration